

Please amend the specification as follows:

Paragraph [0018]

[0018] The ISP, such as America Online, Prodegy Prodigy, and SBC among others, facilitates access to the Internet 102. Users of the EUDs 106 subscribe to Internet service with the ISP 112. The Wireless Access Network 100 allows these users to access the Internet 102 wirelessly.

Paragraph [0020]

[0020] Figure 1 is a highly simplified diagram. In a real life network there could be a hierarchy of switches 110 and hubs ~~connection~~ connecting thousands of APs 104 with a variety of ~~ISP~~ ISPs 112. Furthermore, embodiments of the present invention need not be practiced in a strict wireless access network context. For example, one embodiment of the present invention may be in a wireless peer-to-peer network. During authentication however, one peer will be acting as an AP 104 and the other as the UT 108 of a wireless access network.

Paragraph [0022]

[0022] When ~~at~~ a UT 108 arrives in the coverage area of an AP 104 it begins the registration process. Registration is a relationship that enables the UT 108 to exchange communications streams with the AP 104. The authentication protocol described with reference to Figure 2 is a part of the registration process.

Paragraph [0024]

[0024] To verify a certificate, one decrypts the signature with the published CA public key and computes the digest from the text message. If these two text strings match, that then the certificate was indeed signed by the CA. There are commercial CAs, such as VeriSign, Inc., or a network operator can create its own CAs. Public key cryptography and its use to create and verify digital certificates is well known.

Paragraph [0030]

[0030] In block 208, the UT 108 scrambles the UT certificate given to ~~in it~~ by the CA. The UT certificate includes an identifier of the UT 108, such as its MAC address, and a public key associated with the private key used to sign the authenticator string. The certificate can include various other data fields containing information about the UT 108. One reason for scrambling the UT certificate is to hide the UT identifier. This makes tracking the UT 108 difficult.

Paragraph [0035]

[0035] The ordering of the blocks in Figure 2 represents merely one embodiment, and is in no way limiting. In some embodiments, several values to be included in the UT parameters message can be pre-calculated, ~~causing some~~ Some blocks will ~~this~~ thus be ~~performed~~ performed in different orders. Other blocks can be completely omitted. For example, if the UT 108 already has a trusted time reference, e.g. when the UT 108 already has the time from an authenticated AP 104, block 226 and perhaps block 212 may be omitted. Furthermore, the UT 108 may have a stored copy of the AP certificate from a

prior registration. In this case block 202 may have been already performed. In one embodiment, the UT 108 stores AP certificates, or at least AP public keys, for several frequently accessed APs 104.

Paragraph [0041]

[0041] In one embodiment, the AP 104 can generate the authenticator message and the authenticator message digest independently. In this case, the AP 104 decrypts the authenticator ~~string~~ string with the UT public key, generates a digest of the authenticator message, and compares the decrypted authenticator string to the independently generated authenticator message digest. In this manner, the AP 104 can verify that the UT 108 is in possession of the UT private key paired with the UT public key in the UT certificate.

Paragraph [0053]

[0053] In one embodiment, the service certificate indicates the quality – or grade – of service granted to the UT 108 by the subscription. For example, ~~is~~ if a user of an EUD 206 connection to the ISP 112 using a UT 108 chooses ~~two~~ to subscribe to one high-speed data and one voice session, a code representing this grade of service can be included in the service certificate, either in the same field, or in a separate field than the subscription identifier.

Paragraph [0054]

[0054] Since the subscription identifier and the grade of service are not known at manufacture of the UT 108, they need to be downloaded at a later time. In one embodiment, this is done using the identity certificate, or some other factory seeded UT certificate. One embodiment of such a process is described with reference to Figure 4. In block 410, the AP 104 receives the factory seeded certificate – for example the identity certificate – ~~from~~ from a UT 108 that is registering for the first time, or that has no current subscription.